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EXAMINER

DUDA, ADAM K

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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/791,212	JONES ET AL.	
	Examiner	Art Unit	
	ADAM DUDA	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/11/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 6, 7, 10, 11, 13 and 14, 15, 16, 17, 23, 24, 26, 27 rejected under 35 U.S.C. 103(a) as being unpatentable over **Morrison (U.S. 2002/0087731)** in view of **Cisco SOHO 90 Series Secure Broadband Router Data Sheet** and in view of RFC 1305 ("Network Time Protocol (Version 3)").

Morrison discloses:

Regarding claim 1, (Currently amended) a method of clock setting comprising (**see Morrison; abstract; “method are disclosed for generating and displaying a local server clock which is synchronized” thus method of clock setting**): receiving a time synchronization request (**see Morrison; paragraph 0024; “when the client requests the Web page from the server, the client can also access the server clock to determine the current time indicated by the server clock”**) at a network node (**see Morrison; paragraph 0023; “displaying a local server clock which is synchronized with a server cock utilizing a client clock”**); performing synchronization through a time signal (**see Morrison; paragraph 0024; “the client may request that the server transmit a particular Web page to the client. When the client requests Web page from the server, the client can also access the server clock to determine the current time indicated by the server clock”**).

Morrison does not specifically disclose:

Regarding claim 1, the network node is a home network node comprising a web server and outputting a time signal to a requesting device via a home network, the requesting device comprising a different node of the home network; and broadcasting time signals from the web server to nodes of the home network without being prompted by a requesting device.

Regarding claim 2, wherein the home network node further comprises a Network Time Protocol (NTP) server.

Regarding claim 4, wherein the home network node further comprises a router, further comprising establishing the home network with the router.

Regarding claim 6, further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer.

Regarding claim 7, receiving at the home network node a network timing signal via a cable modem termination system.

Regarding claim 10, further comprising utilizing a Hypertext Transfer Protocol daemon to respond to the time synchronization request.

Regarding claim 11, further comprising: recognizing the time synchronization request with a Hypertext Transfer Protocol daemon (**i.e. http server, web server, etc.**); accessing information from a Network Time Protocol (NTP) server (**i.e. a switch or router running NTP**) executing at the home network node, the information representing a Coordinated Universal Time value; and including a representation of the information in the time signal

Cisco SOHO 90 Series Secure Broadband Router Data Sheet more specifically discloses:

Regarding claim 1, the network node is a home network node comprising a web server (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”; a home and small office router that is computer premise equipment, therefore equipment located on the customer network premises, such as web server, as a result contains a http daemon, that recognizes network time protocol synchronization requests, thus receiving time synchronization requests**).

Regarding claim 2, wherein the home network node further comprises a Network Time Protocol (NTP) server (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”; the router supports functionality to be a network time protocol server**).

Regarding claim 4, wherein the home network node further comprises a router, further comprising establishing the home network with the router (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”; a router which establishes a home or small office network**).

Regarding claim 6, further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer (see **Cisco SOHO 90 Series Secure**

Broadband Router Data Sheet; page 6 “Table 5”; a router that is digital subscriber line access multiplexer (DSLAM) interoperable)

Regarding claim 7, receiving at the home network node a network timing signal via a cable modem termination system (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; a NTP compatible router that connects to the internet using a cable or DSL modem, therefore receives a network timing signal via a cable modem termination system).**

Regarding claim 10, further comprising utilizing a Hypertext Transfer Protocol daemon (i.e. **http server, web server, etc.**) to respond to the time synchronization request (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; a router that is a web server, therefore contains a http daemon, that recognizes network time protocol synchronization requests).**

Regarding claim 11, further comprising: recognizing the time synchronization request with a Hypertext-Transfer Protocol daemon (i.e. **http server, web server, etc.**; see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; a router that is a web server that recognizes time synchronization requests);** accessing information from a Network Time Protocol (NTP) server (i.e. **a switch or router running NTP)** executing at the home network node, the information representing a Coordinated Universal Time value (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; a network time protocol, therefore information sent is representing a Coordinated Universal Time);** and including a representation of the information in the time signal (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; network time protocol data represent time signal data).**

Regarding claim 13, further comprising: receiving another time synchronization request at the home network node (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”**; router acts as an **SNTP client**, therefore receiving time synchronization requests at the **home or small office network node**) and outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. **computer premise equipment**) of the home network (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”**; router acts as an **SNTP server**, therefore sending time synchronization information to different requesting computer premise equipment on the **home or small office network**).

RFC 1305 (“Network Time Protocol (Version 3)”) more specifically discloses:

Regarding claim 1, outputting a time signal to a requesting device via a home network, the requesting device comprising a different node of the home network (see **RFC 1305; “Modes Of Operation” points titled “Client (3)” and “Server (4)”**; “a host operating in this mode sends periodic messages regardless of the reachability state or stratum of its peer. By operating in this mode the host, usually a LAN workstation, announces its willingness to be synchronized by, but not to synchronize the peer” thus a host, a home network node, requesting synchronization from a “server” who “announces its willingness to synchronize, but not to be synchronized by the peer” hence outputting a time signal to a requesting device via a home network); and broadcasting (see **RFC 1305; “Modes of Operation” point titled “Broadcast (5)”**; “broadcast” mode, thus broadcasting) time signals from the web server (i.e. **server**) to nodes of the home network (see **RFC 1305; “Modes of Operation” point titled “Broadcast (5)”**; “announces its willingness to synchronize all of the peers, but not to be synchronized by any of them”) without being prompted by a requesting device (see **RFC 1305; “Modes of Operation”; “Broadcast mode ... in the typical scenario one or more time servers on the LAN send periodic broadcasts to the**

workstations, which then determine the time on the basis of a preconfigured latency in the order of a few milliseconds”).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Morrison, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible while allowing for advanced management capabilities (page 1 “Affordable, secure, easy-to-use, broadband access for small offices”).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Morrison, as taught by **RFC 1305 (“Network Time Protocol (Version 3)”)**, thereby allowing for the synchronization of timekeeping among a set of distributed time servers and clients (**see RFC 1305; Introduction**); not requiring reliable message delivery (**see RFC 1305; Introduction**); and providing the protocol mechanisms to synchronize time in principle to precisions in the order of nanoseconds while preserving a non-ambiguous date will into the next century (**see RFC 1305; Introduction**).

Morrison discloses:

Regarding claim 14, a time adjusted system (**see Morrison; abstract; "method are disclosed for generating and displaying a local server clock which is synchronized" thus method of clock setting**)

Morrison does not specifically disclose:

Regarding claim 14, comprising: a housing component at least partially defining an external surface and an internal cavity; a broadband modem component at least partially located within the internal cavity; a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem, the home networking mechanism operable to facilitate providing a home network node with access to a backhaul enabled by the broadband modem; a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory; and the memory comprising instructions operable to direct the processor to embody a web server, to receive a timing signal from a remote Public Internet time code protocol server, and to communicate time information representing the timing signal to the home network node via the home networking mechanism without being prompted by a request from the home network node.

Regarding claim 15, further comprising a network operator access concentrator (**i.e. a device that allows for communication between two devices**) communicatively coupled to the broadband modem and operable to pass the timing signal

Regarding claim 16, wherein the access concentrator (**i.e. a device that allows for communication between two devices**) comprises a digital subscriber line access multiplexer

Regarding claim 17, the access concentrator comprises a cable modem termination system

Regarding claim 23, wherein the broadband modem comprises an xDSL modem.

Regarding claim 24, wherein the broadband modem comprises a cable modem.

Cisco SOHO 90 Series Secure Broadband Router Data Sheet more specifically discloses:

Regarding claim 14, comprising: a housing component at least partially defining an external surface and an internal cavity (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 Figure 1 “SOHO 90 Series Secure Broadband Routers”**; a housing component with an external surface and an internal cavity); a broadband modem component at least partially located within the internal cavity (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**; a integrated broadband ADSL WAN port, a broadband modem component); a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**; page 1 Figure 1 “SEOHO 90 Series Secure Broadband Routers”; a home and small office networking router, a networking mechanism, located within the internal cavity with integrated broadband ADSL WAN port, a broadband modem component), the home networking mechanism operable to facilitate providing a home network node with access to a backhaul enabled by the broadband modem (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**; page 1 “Secure Internet Access”; page 1 “Easy Set Up and Deployment”; the networking router, a networking mechanism, enables broadband connection sharing by the broadband modem); a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 Table 2 “Cisco SOHO 90 Series Hardware Specification”**; a router processor from the router, therefore located within the internal cavity and in communication to the memory and broadband modem); and the memory comprising instructions operable to direct the processor to embody a web server (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Easy Set Up and Deployment”**; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco

SOHO 90 Series Routers”; the router is a web server, therefore the memory comprises instructions operable to direct the processor), to receive a timing signal from a remote Public Internet time code protocol server (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; router supports being a network time protocol server and client, thus receiving a timing signal), and to communicate time information representing the timing signal to the home network node via the home networking mechanism (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; router supports being a network time protocol client and server, thus communicating time information to the home or small office network).

Regarding claim 15, further comprising a network operator access concentrator (i.e. a **device that allows for communication between two devices**) communicatively coupled to the broadband modem and operable to pass the timing signal (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 “Table 5”; network time protocol is a client and server therefore receives timing signal through broadband connection, therefore **communication between the broadband modem and timing signal exists**)

Regarding claim 16, wherein the access concentrator (i.e. a **device that allows for communication between two devices**) comprises a digital subscriber line access multiplexer (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 “Table 5”; a router that is **digital subscriber line access multiplexer (DSLAM) interoperable**)

Regarding claim 17, the access concentrator comprises a cable modem termination system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; a NTP compatible router that connects to the internet using a cable or DSL modem, therefore receives a network timing signal via a cable modem termination system)

Regarding claim 23, wherein the broadband modem comprises an xDSL modem (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 7 “SOHO 97 ADSL Specifications”; a router that supports DSL).

Regarding claim 24, wherein the broadband modem comprises a cable modem (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for the small offices”; broadband modem comprises a cable modem**)

Regarding claim 26, the system wherein the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 4 “Table 2 Cisco SOHO 90 Series Hardware Specification”; page 5 “Table 4: Protocols and Features Supported by Cisco SOHO 90 Series Routers”; network time protocol is supported by the router as a client and server, therefore the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes**).

Regarding claim 27, the system further comprising a Hypertext Transfer Protocol daemon (i.e. **http server, web server, etc.**) operable to receive a request for the time information from the home network node (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; a router that is a web server, therefore contains a http daemon, that recognizes network time protocol synchronization requests**).

RFC 1305 (“Network Time Protocol (Version 3)”) more specifically discloses:

Regarding claim 14, synchronization (see **RFC 1305; “Modes of Operation” point titled “Broadcast (5)”; “announces its willingness to synchronize all of the peers, but not to be synchronized by any of them”**) using the timing signal without being prompted by a request from the home network node (see **RFC 1305; “Modes of Operation”; “Broadcast mode ... in the typical scenario one or more time servers on the LAN send periodic broadcasts to the workstations, which then determine the time on the basis of a preconfigured latency in the order of a few milliseconds”**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Morrison, as taught by Cisco SOHO 90 Series Secure Broadband Router Data Sheet, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible while allowing for advanced management capabilities (**page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Morrison, as taught by RFC 1305 (“Network Time Protocol (Version 3)”), thereby allowing for the synchronization of timekeeping among a set of distributed time servers and clients (**see RFC 1305; Introduction**); not requiring reliable message delivery (**see RFC 1305; Introduction**); and providing the protocol mechanisms to synchronize time in principle to precisions in the order of nanoseconds while preserving a non-ambiguous date well into the next century (**see RFC 1305; Introduction**).

5. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over **Morrison (U.S. 2002/0087731)** in view of **Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of RFC 1305 ("Network Time Protocol (Version 3)"**), and further in view of **Cisco SOHO 71 Broadband Routing Data Sheet, all pages**.

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 do not specifically disclose:

Regarding claim 3, wherein the home network node further comprises a broadband modem (i.e. to provide a network connection).

Cisco SOHO 71 Broadband Router Data Sheet discloses:

Regarding claim 3, wherein the home network node further comprises a broadband modem (i.e. to provide a network connection; see **Cisco SOHO 71 Broadband Router Data Sheet; page 1 "Table 1 Benefits Overview of Cisco SOHO 71 Broadband router"; a broadband router that acts as a modem**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Morrison in view of Cisco SOHO 90 and in view of RFC 1305, as taught by **Cisco SOHO 71 Broadband Router Data Sheet**, thereby allowing multiple users to share a broadband connection while offering: secure internet access with manageable stateful firewall, simple set up, and proven reliability and manageability with IOS software (see **Cisco SOHO 71 Broadband Router; page 1 of 7**).

6. Claims 8, 9, 12 and 18, 19, 20, 21, 25, 34 rejected under 35 U.S.C. 103(a) as being unpatentable over **Morrison (U.S. 2002/0087731) in view of Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of RFC 1305 ("Network Time Protocol (Version 3)"),** and further in view of **Hodge (U.S. 438,702 B1)**

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 disclose:

Regarding claim 12, outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (**i.e. computer premise equipment**) of the home network (**see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP server, therefore sending time synchronization information to different requesting computer premise equipment on the home or small office network**)

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 do not disclose:

Regarding claim 8, wherein the different node comprises a piece of Internet Protocol enabled Customer Premises Equipment (IP-enabled CPE)

Regarding claim 9, wherein the IP-enabled CPE is selected from a group consisting of a telephone, a clock, a kitchen appliance, a television, a game console, and a Set Top Box (STB).

Regarding claim 12, receiving time synchronization requests at the home network node.

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 does disclose:

Regarding claim 8, wherein the different node comprises a piece of Internet Protocol enabled Customer Premises Equipment (IP-enabled CPE) (**see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore computer equipment connected to the network on the customer premises, is present**)

Regarding claim 9, wherein the IP-enabled CPE is selected from a group consisting of a telephone, a clock, a kitchen appliance, a television, a game console, and a Set Top Box (STB) **(see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore equipment connected to the network on the customer premises, is present and time synchronized with the network provider's time server).**

Regarding claim 12, receiving time synchronization requests at the home network node **(see Hodge et al.; col. 4 lines 32-65; retrieval of time synchronization requests at the computer premise equipment, the home network node).**

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Morrison in view of Cisco SOHO 90 and in view of RFC 1305**, as taught by **Hodge**, thereby using a method that provides precise frequency and universal time information and related time measurements at CPE's without the need for special or expensive components while having a better than millisecond accuracy would **(see Hodge; col. 3 lines 26-31).**

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 do not disclose:

Consider claim 18, wherein the home network node comprises a Voice over Internet Protocol (VoIP) telephone.

Consider claim 19, wherein the home network node comprises a clock.

Consider claim 20, wherein the home network node comprises an oven.

Consider claim 21, wherein the home network node comprises a piece of Internet Protocol enabled consumer electronic equipment.

Consider claim 25, further comprising a plurality of home network nodes.

Consider claim 34, further comprising: outputting a Network Time Protocol (**NTP**) request to a NTP server; receiving a response from the NTP server including a different Coordinated

Universal Time value and updating the time information in the memory to represent the different Coordinated Universal Time value.

Hodge discloses:

Consider claim 18, wherein the home network node comprises a Voice over Internet Protocol (VoIP) telephone (**see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore Voice over Internet Protocol (VoIP) telephone equipment connected to the network on the customer premises**).

Consider claim 19, wherein the home network node comprises a clock (**see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore a clock equipment connected to the network on the customer premises**).

Consider claim 20, wherein the home network node comprises an oven (**see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore an oven connected to the network on the customer premises**).

Consider claim 21, wherein the home network node comprises a piece of Internet Protocol enabled consumer electronic equipment (**see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore IP enabled equipment connected to the network on the customer premises**).

Consider claim 25, Hodge et al, teaches the system 14, further comprising a plurality of home network nodes (**see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore equipment connected to the network on the customer premises, is present**).

Consider claim 34, teaches further comprising: outputting a Network Time Protocol (NTP) request to a NTP server (**see Hodge et al.; Figure 1; col. 1 lines 5-8; col. 2 lines 27-65; col. 4 lines 37-41; the computer premise equipment, therefore a router such as Cisco SOHO 90 Series Secure Router which is a NTP client and server, receives NPT requests and serves other computer premise equipment**); receiving a response from the NTP server including a different Coordinated Universal Time value (**i.e. universal time information; see Hodge et al.;**

col. 1 lines 5-8; universal time information is received from the provider time server) and updating the time information in the memory to represent the different Coordinated Universal Time value (see Hodge et al.; col. 2 lines 27-65; col. 7 lines 15-39; time synchronization between devices, thus a memory is updated to represent the universal time value).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Morrison in view of Cisco SOHO 90 and in view of RFC 1305**, as taught by Hodge, thereby using a method that provides precise frequency and universal time information and related time measurements at CPE's without the need for special or expensive components while having a better than millisecond accuracy would (**see Hodge; col. 3 lines 26-31**).

1. Claims 5 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over **Morrison (U.S. 2002/0087731)** in view of **Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of RFC 1305 ("Network Time Protocol (Version 3)"**), and further in view of **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T, 2002, Cisco Systems, all pages.**

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 does not disclose:

Regarding claim 5, the router comprises a wireless router embodying an 802.11 (x) access point.

Release Notes for Cisco Aironet 1200 disclose:

Regarding claim 5, the router comprises a wireless router embodying an 802.11 (x) access point (see **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 4 "Limitations and Restrictions"; a wireless access point supporting IEEE 802.11 links**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet** by the router comprises a wireless router embodying an 802.11 (x)access point, as taught by **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T**, thereby simplifying the network infrastructure (**i.e. topology**) by replacing two nodes with one node.

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 does not disclose:

Regarding claim 22, wherein the home networking mechanism comprises an 802.11 (x) access point.

Release Notes for Cisco Aironet disclose:

Regarding claim 22, wherein the home networking mechanism comprises an 802.11 (x) access point (**see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 4 “Limitations and Restrictions”; a wireless access point supporting IEEE 802.11 links**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet** by wherein the home networking mechanism comprises an 802.11 (x) access point, as taught by **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T**, thereby simplifying the network infrastructure (**i.e. topology**) by replacing two nodes with one node.

2. Claims 28, 29, and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over **Hodge et al. (U.S. 6,438,702 B1)** in view of **Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages** and in view of **RFC 1305 ("Network Time Protocol (Version 3)")**.

Hodge discloses:

Regarding claim 28, a method of adjusting a remote time keeping device system (**see Hodge et al.; Abstract; a time synchronization method, adjusting a remote time keeping device system**), comprising: making a remote time adjustment service available to a subscriber of a data service (**see Hodge et al.; Abstract; col. 1 lines 5-8; col. 2 lines 26-65; timing information is provided in communications networks**) communicatively coupling a service provider network node with a piece of customer premises equipment (CPE) associated with the subscriber (**see Hodge et al.; Figure 1; col. 4 lines 31-52; col. 7 lines 5-19; a network provider network providing timing information to the customer premise equipment**), receiving a request for time information communicated from the piece of CPE via a communication link at least partially interconnecting the service provider network node and the piece of CPE (**see Hodge et al.; col. 2 lines 27-65; col. 4 lines 36-41; time server supplies time information to customer premise equipment through links, therefore the time server responding to requests for time information from the CPE's**) maintaining time information representing a Coordinated Universal Time value in a memory (**see Hodge et al.; col. 1 lines 5-8; invention provides universal time information, therefore Coordinated Universal Time values**); and outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information (**see Hodge et al.; col. 2 lines 27-65; col. 4 lines 36-41; time server supplies time information to customer premise equipment through links, therefore IP packets containing universal time information are transmitted through links**).

Regarding claim 29, **Hodge et al.** discloses further comprising providing the subscriber with the piece of CPE (see **Hodge et al.**; col. 1 lines 27-65; col. 4 lines 37-41; col. 7 lines 15-19; **Figure 1; subscriber has computer premise equipment**), the piece of CPE comprising a service provider network interface and a home network interface (see **Hodge et al.**; col. 1 lines 27-65; col. 4 lines 37-41; col. 7 lines 15-19; **Figure 1; customer premise equipment is connected to network provider, therefore comprising a service provider network interface to connect**)

Hodge does not specifically disclose:

Regarding claim 28, making a remote time adjustment service available to a subscriber of a broadband data service; the piece of CPE comprising a broadband modem device; receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE; broadcasting time signals from the piece of CPE to nodes of a home network without being prompted by a requesting device of the home network.

Regarding claim 29, the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from a home network node via the home network interface.

Regarding claim 31, comprising a Point to Point over Ethernet (i.e. **PPPoE: Point to Point Protocol over Ethernet**) client executing on the processor.

Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses:

Regarding claim 28, making a remote time adjustment service available to a subscriber of a broadband data service (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**; page 5 **“Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”**; the

router provides broadband internet service, thus data service, while providing time adjustment service through the network time protocol); the piece of CPE comprising a broadband modem device (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**; the broadband router, a piece of computer premise equipment (CPE), router comprises a broadband modem device); receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”**; page 5 **“Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”**; a router, thus a piece of CPE, that has a broadband communication link used for connecting to a service provider to receive timing information at the router, a piece of CPE); outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information (see **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”**; router supports the NTP protocol, therefore does NTP communication, that contains time information, through the broadband communication link).

Regarding claim 29, the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from one of the home network nodes via the home network interface (see **Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”**; page 3 **“Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”**; page 5 **“Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”**; page 5 **“Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”**; a home and small office router that is computer premise equipment, therefore equipment located

on the customer network premises, such as web server, as a result contains a http daemon, that recognizes network time protocol adjustment information).

Regarding claim 31, comprising a Point to Point over Ethernet (i.e. PPPoE: Point to Point Protocol over Ethernet) client executing on the processor (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 4 "Table 2 Cisco SOHO 90 Series Hardware Specifications"; page 4 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a processor that executes PPPoE client functionality)

RFC 1305 ("Network Time Protocol (Version 3)") discloses:

Regarding claim 28, broadcasting (see RFC 1305; "Modes of Operation" point titled "Broadcast (5)"; "broadcast" mode, thus broadcasting) time signals from the piece of CPE to nodes of a home network (see RFC 1305; "Modes of Operation" point titled "Broadcast (5)"; "announces its willingness to synchronize all of the peers, but not to be synchronized by any of them") without being prompted by a requesting device of the home network (see RFC 1305; "Modes of Operation"; "Broadcast mode ... in the typical scenario one or more time servers on the LAN send periodic broadcasts to the workstations, which then determine the time on the basis of a preconfigured latency in the order of a few milliseconds").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Cisco SOHO 90 Series Secure Broadband Routers Data Sheet, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible and simplifying the network infrastructure node complexity.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Morrison, as taught by RFC 1305 ("Network Time Protocol (Version 3)"), thereby allowing for the synchronization of timekeeping among a set of distributed time servers and clients (see

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RFC 1305; Introduction); not requiring reliable message delivery (**see RFC 1305; Introduction**); and providing the protocol mechanisms to synchronize time in principle to precisions in the order of nanoseconds while preserving a non-ambiguous date will into the next century (**see RFC 1305; Introduction**).

3. Claim 30 rejected under 35 U.S.C. 103(a) as being unpatentable over **Hodge et al. (U.S. 6,438,702 B1)** in view of **Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of RFC 1305 ("Network Time Protocol (Version 3")**, and further in view of **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T, 2002, Cisco Systems, all pages.**

Hodge in view of Cisco SOHO 90 and in view of RFC 1305 disclose:

Regarding claim 30, wherein the piece of CPE is an integrated home networking device comprising the broadband modem device, the HTTP daemon, a processor, a router (**see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 4 "Table 2 Cisco SOHO 90 Series Hardware Specifications"; page 5 "Table 4 Protocols and features Supported by Cisco SOHO 90 Series Routers"; the router comprises a broadband mode, web server, thus a http daemon, and a processor**)

Hodge in view of Cisco SOHO 90 and in view of RFC 1305 do not specifically disclose:

Regarding claim 30, a local area wireless transceiver

Cisco Aironet 1200 more specifically discloses:

Regarding claim 30, a local area wireless transceiver (**see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 2 "Introduction"; a local area wireless transceiver**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco SOHO 90 Series Secure Broadband Routers Data Sheet** by a local area wireless transceiver, as taught by **Cisco Aironet 1200 Series Access Point Running**

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Firmware Version 12.00T, thereby simplifying the network infrastructure (topology) by integrating the components.

4. Claims 32 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over **Morrison (U.S. 2002/0087731)** and **Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of RFC 1305 ("Network Time Protocol (Version 3)"**), and further in view of **van der Kaay et al. (U.S. 6,393,126 B1)**

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 do not specifically disclose:

Regarding claim 32, maintaining a repository comprising information about the subscriber, the information indicating that the subscriber (**i.e. client**) subscribes to the remote time adjustment service; considering the information in connection with generating an; and including a charge for the remote time adjustment service in the invoice.

Van der Kaay more specifically discloses:

Regarding claim 32, maintaining a repository comprising information about the subscriber (**see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers**), the information indicating that the subscriber (**i.e. client**) subscribes to the remote time adjustment service (**see van der Kaay et al.; col.. 15 lines 39-49; a client is billed, therefore the client subscribes to the remote time adjustment service**); considering the information in connection with generating an invoice (**i.e. billing report**) for the subscriber (**see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers**); and including a charge for the remote time adjustment service in the invoice (**see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients**

automatically, therefore a repository is maintained with comprises information about the subscribers' remote time adjustment service).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco Series Secure Broadband Router Data Sheet** by maintaining a repository comprising information about the subscriber, the information indicating that the subscriber (**i.e. client**) subscribes to the remote time adjustment service; considering the information in connection with generating an; and including a charge for the remote time adjustment service in the invoice, as taught by **Van der Kaay et al.**, thereby facilitating the operation of the invention as an on-going business concern (**col. 15 lines 39-49**).

Morrison in view of Cisco SOHO 90 and in view of RFC 1305 do not specifically disclose:

Regarding claim 33, further comprising making the remote time adjustment service available to a plurality of subscribers.

Van der Kaay discloses:

Regarding claim 33, further comprising making the remote time adjustment service available to a plurality of subscribers (**i.e. clients; see van der Kaay et al.; col. 15 lines 39-49; speaks of a plurality of clients, thus the remote time adjustment service is available to a plurality of subscribers**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco Series Secure Broadband Router Data Sheet** by further comprising making the remote time adjustment service available to a plurality of subscribers, as taught by **Hodge et al. and Cisco Series Secure Broadband Router Data Sheet**, thereby creating facilitating the operation of the invention as an on-going business concern (**col. 15 lines 39-49**).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

---, "Cisco SOHO 71 Broadband Router", 1992-2001, Cisco Systems, all pages.

Deeths, David et al., "Using NTP to Control and Synchronize System Clocks - Part I: Introduction to NTP", all pages.

Demopoulos, Drusie, "Switching routers answer the call for more bandwidth, performance", Jun 30, 1997, Network World, all pages

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM K. DUDA whose telephone number is (571)270-5136. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. K. D./
Examiner, Art Unit
29 July 2008

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2616